

In the Specification:

A¹ [0003] Many applications such as engine controller applications often require the integration of many different substrate technologies into a single application. For example, electronics associated with controlling an engine ~~require~~ have sensitive micro-electronics requiring assembly to a printed circuit board that typically occurs within a clean room, be integrated with more durable devices, such as output driver circuits that are implemented with flip-chips on thick film ceramic substrates. The latter requiring a heat sink for heat removal from the power dissipating circuitry.

A² [0008] According to the present invention there is provided a housing, preferably cast aluminum, having a cavity in one or more facing sides. Hybrid circuits, and specifically ceramic-based hybrid circuits, are housed in the cavities. A bottom portion seals the housing and has a row of pins is provided for interconnecting the circuits housed in the separated cavities, thereby allowing the integration of different types of circuits in a single, fully enclosed, yet partitioned, housing. Further, the housing itself can be connected to another device such as a printed circuit board. Thereby providing interconnection between the hybrid assemblies within the housing and other external devices.

A³ [0013] FIGURE 1 is an exploded view of the integrated heat rail assembly of the present invention; and

A⁴ [Insert Paragraph between 0013 and 0014] FIGURE 2 is an isometric view of another embodiment of the integrated heat rail assembly of the present invention.